Applicant: David Shen Attorney's Docket No.: 18085-004001

Serial No.: 10/729,674 Filed: December 5, 2003

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## Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

## Listing of Claims:

 (Currently Amended) A multiple frequency band receiver for selecting a multiple frequency band RF signal and having reduced number of components in a RF front end system, the receiver comprising:

an amplifier for each frequency band with <u>an</u> output connected to <u>an</u> input of an filter for each frequency band, <u>wherein</u> the output of said filters <u>for each frequency band is coupled</u> eonnected to <u>an</u> input of a buffer stage for <u>said</u> each frequency band, and <u>an the-output of each</u> said buffer stage is <u>coupled</u> eonnected together; and;

a mechanism to power down each of the buffer stages in order to select a frequency band; wherein the said filters can be any filter types including all pass.

- (Currently Amended) The receiver of claim 1 wherein the receiver comprises an
  architecture that is any of a superheterodyne architecture, a low-intermediate frequency, a direct
  conversion, or a quasi-direct conversion type.
- (Currently Amended) The receiver of claim 1 wherein the output of <u>each of</u> said buffer stages is connected to <u>an</u> the input of a mixer.
- 4. (Currently Amended) The receiver of claim 1 further comprising a low noise amplifier (LNA) for <u>said</u> each frequency band and each of the non-selected frequency bands, wherein the receiver is configured to power which can be powered down the non-selected frequency bands to improve isolation of the non-selected frequency bands.

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 (Currently Amended) The receiver of claim 1 wherein <u>each of</u> the buffer stages comprise ef-emitter follower circuits.

- (Currently Amended) The receiver of claim 1 wherein <u>each of</u> the buffer stages comprise of source follower circuits.
- (Currently Amended) The receiver of claim 1 wherein each of the buffer stages
  comprise an of any known amplifier topology including a low noise amplifier with power down
  capability.
- 8. (Currently Amended) The receiver of claim 1 wherein a the number of selectable frequency bands is an integer N, where N>1.
- (Currently Amended) The receiver of claim 1 wherein the said filters are external components to an the-RF chip.
- (Currently Amended) The receiver of claim 1 wherein the said filters are integrated resonant elements on an the RF chip.
- (Previously Presented) The receiver of claim 1 wherein the receiver is implemented with CMOS, bipolar, BiCMOS, or SiGe technologies.
- 12. (Currently Amended) A method of receiving multiple frequency bands by selecting a multiple frequency band RF signal and of reducing the <u>a</u> number of components in <u>an</u> RF front end system, the method comprising:

amplifying a multiple frequency band RF signal for each frequency band;

filtering said amplified multiple frequency band RF signal for <u>said</u> each frequency band; by any types of filters including all pass.

buffering said filtered multiple frequency band RF signal for <u>said</u> each frequency band <u>with by buffer stages that have with</u> outputs connected together; <u>and</u>: Applicant: David Shen Attorney's Docket No.: 18085-004001

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powering down the buffer stages to select a frequency band.

13. (Currently Amended) The method of claim 12 13 wherein the method of receiving comprises receiving with a receiver architecture type that comprises any of is a superheterodyne, a low-intermediate frequency, a direct conversion or a quasi-direct conversion type.

- (Currently Amended) The method of claim <u>12</u> <del>13</del> wherein the buffered and band selected RF signal is mixed by a mixer.
- 15. (Currently Amended) The method of claim 12 13 wherein the multiple frequency band RF signal is further amplified by a low noise amplifier (LNA) for each frequency band and the a non-selected frequency band is configured to be ean be powered down to improve isolation of the non-selected frequency band.
- (Currently Amended) The method of claim 12 43 wherein the buffer stages comprise of emitter follower or source follower circuits.
- (Currently Amended) The method of claim 12 43 wherein the buffer stages comprise of a low noise amplifier with power down capability.
- (Currently Amended) The method of claim 12 +3 wherein the buffer stages comprise an of any known amplifier topology including a low noise amplifier with power down capability.
- (Currently Amended) The method of claim 12 13 wherein a the number of selectable frequency bands is an integer N, where N>1.